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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,932

12/08/2003

Toshimitsu Konuma

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9654

31780

7590

03/01/2005

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EXAMINER

NGO, HUYEN LE

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/728,932

Applicant(s)

KONUMA, TOSHIMITSU

Examiner

Julie-Huyen L. Ngo

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/25/2004 and 1/24</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) with corrections submitted on August 25, 2004, which replaced the IDS submitted on December 8, 2003, has been reconsidered with indications requested by Application to cross out reference EP 0376030 (with incorrect filing date) and reconsideration of the same reference with corrected filing date.

### ***Response to Arguments***

Applicant's arguments, see Applicant remark (pages 2-4) filed on January 24, 2005, with respect to the rejections of claims 6 and 12 under the reference of Tilton alone, and 6-16 under in combination of Tilton, Kanemoto and Nakagawa et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Isogai et al as follow:

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 6-9 and 12-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13,14 and 16 of U.S. Patent No. 6693696B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the spacing in said substrates being less than 3.5  $\mu\text{m}$  recited in claim 1 of the instant application is in a range of 5  $\mu\text{m}$  or less for the interval of the substrates as recited in claim 16 of U.S. Patent No. 6693696B1. A pair of orientation films must be inherently provided adjacent to (near to) and between said pair of substrates.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanemoto et al. (US5250214A) in view of Nakagawa et al. (US4983023) and in further view of Isogai et al. (US4634226).

With respect to claims 6, 10-12 and 16, Kanemoto et al. teach (Fig. 2) forming a display device comprising:

- a pair of substrates 11/21;

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- a liquid crystal layer 15 provided between said pair of substrates and comprising a nematic liquid crystal having positive dielectric anisotropy (col. 5 lines 52-56);
- a pair of orientation films 13/23 provided over adjacent to (near to) and between said pair of substrates respectively;

wherein

- said orientation films have a surface tension of 40 dyne/cm or more (col. 26 lines 61-66);

(Claims 7 and 13)

- each of said orientation films comprises a polyimide.

(claims 9 and 15)

- a first electrode provided over one of said substrates; and a second electrode provided over the other of said substrates .

(Claims 8 and 14)

- It is well known in the art for a display device to function as a reflective -type display device with a reflection layer on surface of lower substrate for reflecting ambient light

However, Kanemoto et al. and conventional art fail to disclose a display device having spacing between the substrates being less than 3.5  $\mu\text{m}$ .

Nakagawa et al. teach (col. 3 lines 55-60) forming a display device having spacing between the pair of substrates being less than  $3.5\text{ }\mu\text{m}$  for obtaining high quality display.

Therefore, it would have been obvious for one having ordinary skill in the art to modify Kanemoto et al. display device with the space between the substrates being less than  $3.5\text{ }\mu\text{m}$  for obtaining high quality display, as taught by Nakagawa et al.

With respect to the pair of orientation films having antiparallel orientation directions to each other recited in claims 6 and 12, Isogai et al teach (col. 1, lines 7-10 and col. 10, line 63 to col. 11, line 4) forming a LCD comprising a pair of orientation films having antiparallel orientation directions to each other for obtaining a uniform alignment of liquid crystal molecules. Doing so would provide an optical apparatus with good response characteristic.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the display device of Kanemoto et al. in view of Nakagawa et al. with a pair of orientation films having antiparallel orientation directions to each other for obtaining a uniform alignment of liquid crystal molecules, and having display device with good response characteristic, as taught by Isogai et al.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

February 24, 2005

  
***Julie-Huyen L. Ngo***  
Primary Examiner  
Art Unit 2871